UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,226	03/07/2001	Mika Aalto	PM 276662	1688

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EXAMINER
CHOUDHURY, AZIZUL Q

ART UNIT	PAPER NUMBER
2145	

DATE MAILED: 11/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	**Applicant(s)**
Office Action Summary	09/762,226	AALTO ET AL.
	Examiner	**Art Unit**	
	Azizul Choudhury	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*31 August 2005*</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>*1-14*</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>*1-14*</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>*05 February 2001*</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

Detailed Action

This office action is in response to the correspondence received on August 31, 2005.

Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last

Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Dulman (US Pat No: 5,915,008) in view of Strauss et al (US Pat No: 5,940,598),

hereafter referred to as Dulman and Strauss, respectively.

1. With regards to claims 1 and 8, Dulman teaches through Straus, a method for

   connecting one of several customer premises equipment, or customer premises

   equipment, via an ATM network to one of several service providers, said method

   comprising: connecting each customer premises equipment to an ATM network

   via a corresponding network termination point; and forming an access server

   function, having a permanent virtual connection to each NT and a connection to

each service provider; establishing a tunneling protocol on said permanent virtual

connection between each NT and said access server function, said tunneling

protocol being able to support an integrated signaling protocol; the customer

premises equipment or its user selecting an appropriate service provider by using

said integrated signaling protocol; performing routing from said customer

premises equipment to said selected service provider by said access server

function connecting the customer premises equipment to the selected service

provider using said integrated signaling protocol

(Dulman teaches a design for an advanced intelligent network (AIN) (column

4, lines 20-24, Dulman). The design features one or more CPE (element 16,

figure 2, Dulman) connected to a NAT (equivalent to NT) (element 11, figure 2,

Dulman). The NAT is attached to the AIN (element 44, figure 2, Dulman), which

provides access to the available services (equivalent to SP) (elements 48-60,

figure 2, Dulman). The AIN is capable of being an ATM (column 10, lines 58-61,

Dulman).

Strauss also teaches a design that features an AIN (column 7, lines 40-45,

Strauss). The design teaches how encapsulation means are present for AIN

type networks (encapsulation is equivalent to tunneling) (column 8, line 45,

Strauss).

It would have been obvious to one skilled in the art, during the time of the

invention, to have combined the teachings of Dulman with those of Strauss, for

providing a universal or multi-purpose network server having enhanced

processing functions which are performed in association with a

telecommunications network to provide multi-mode communications via a

combination of the public switched telephone network (PSTN) and a public

packet data network, such as the Internet (column 7, lines 23-30, Strauss)).

2. With regards to claims 2 and 9, Dulman teaches through Straus, the method,

further comprising providing one permanent virtual connection from the access

server function to each service provider

(Dulman teaches a design for an advanced intelligent network (AIN) (column

4, lines 20-24, Dulman). The design features one or more CPE (element 16,

figure 2, Dulman) connected to a NAT (equivalent to NT) (element 11, figure 2,

Dulman). The NAT is attached to the AIN (element 44, figure 2, Dulman), which

provides access to the available services (equivalent to SP) (elements 48-60,

figure 2, Dulman). The AIN is capable of being an ATM (column 10, lines 58-61,

Dulman).

Strauss also teaches a design that features an AIN (column 7, lines 40-45,

Strauss). The design teaches how encapsulation means are present for AIN

type networks (encapsulation is equivalent to tunneling) (column 8, line 45,

Strauss). In addition, Strauss also teaches how an AIN can be utilized virtually

(column 13, lines 26-38, Strauss).

It would have been obvious to one skilled in the art, during the time of the

invention, to have combined the teachings of Dulman with those of Strauss, for

providing a universal or multi-purpose network server having enhanced

processing functions which are performed in association with a

telecommunications network to provide multi-mode communications via a

combination of the public switched telephone network (PSTN) and a public

packet data network, such as the Internet (column 7, lines 23-30, Strauss)).

3. With regards to claim 3 and 10, Dulman teaches through Straus, a method,

   further comprising providing a pool of permanent virtual connections from the

   access server function to each service provider; and allocating one connection to

   each network termination point from said pool

   (Dulman teaches a design for an advanced intelligent network (AIN) (column

   4, lines 20-24, Dulman). The design features one or more CPE (element 16,

   figure 2, Dulman) connected to a NAT (equivalent to NT) (element 11, figure 2,

   Dulman). The NAT is attached to the AIN (element 44, figure 2, Dulman), which

   provides access to the available services (equivalent to SP) (elements 48-60,

   figure 2, Dulman). The AIN is capable of being an ATM (column 10, lines 58-61,

   Dulman). The available services (elements 48-60, figure 2, Dulman) each have

   their own dedicated connection allocated with the AIN (element 44, figure 2,

   Dulman).

   Strauss also teaches a design that features an AIN (column 7, lines 40-45,

   Strauss). The design teaches how encapsulation means are present for AIN

   type networks (encapsulation is equivalent to tunneling) (column 8, line 45,

Strauss). In addition, Strauss also teaches how an AIN can be utilized virtually

(column 13, lines 26-38, Strauss).

It would have been obvious to one skilled in the art, during the time of the

invention, to have combined the teachings of Dulman with those of Strauss, for

providing a universal or multi-purpose network server having enhanced

processing functions which are performed in association with a

telecommunications network to provide multi-mode communications via a

combination of the public switched telephone network (PSTN) and a public

packet data network, such as the Internet (column 7, lines 23-30, Strauss)).

4. With regards to claims 4 and 11, Dulman teaches through Straus, a method,

further comprising establishing one switched virtual connection from the access

server function to each service provider, on the basis of signaling which the

access server function receives from said customer premises equipment via said

tunneling protocol

(Dulman teaches a design for an advanced intelligent network (AIN) (column

4, lines 20-24, Dulman). The design features one or more CPE (element 16,

figure 2, Dulman) connected to a NAT (equivalent to NT) (element 11, figure 2,

Dulman). The NAT is attached to the AIN (element 44, figure 2, Dulman), which

provides access to the available services (equivalent to SP) (elements 48-60,

figure 2, Dulman). The AIN is capable of being an ATM (column 10, lines 58-61,

Dulman). The available services (elements 48-60, figure 2, Dulman) each have

their own dedicated connection path allocated with the AIN (element 44, figure 2,

Dulman). The path selected is based on the service requested by the user

(column 4, lines 55-64, Dulman).

Strauss also teaches a design that features an AIN (column 7, lines 40-45,

Strauss). The design teaches how encapsulation means are present for AIN

type networks (encapsulation is equivalent to tunneling) (column 8, line 45,

Strauss). In addition, Strauss also teaches how an AIN can be utilized virtually

(column 13, lines 26-38, Strauss).

It would have been obvious to one skilled in the art, during the time of the

invention, to have combined the teachings of Dulman with those of Strauss, for

providing a universal or multi-purpose network server having enhanced

processing functions which are performed in association with a

telecommunications network to provide multi-mode communications via a

combination of the public switched telephone network (PSTN) and a public

packet data network, such as the Internet (column 7, lines 23-30, Strauss)).

5. With regards to claims 5 and 12, Dulman teaches through Straus, the method,

further comprising establishing said tunneling protocol only in response to

detecting appropriate activity in said customer premises equipment

(Dulman teaches a design for an advanced intelligent network (AIN) (column

4, lines 20-24, Dulman). The design features one or more CPE (element 16,

figure 2, Dulman) connected to a NAT (equivalent to NT) (element 11, figure 2,

Dulman). The NAT is attached to the AIN (element 44, figure 2, Dulman), which

provides access to the available services (equivalent to SP) (elements 48-60,

figure 2, Dulman). The AIN is capable of being an ATM (column 10, lines 58-61,

Dulman). The available services (elements 48-60, figure 2, Dulman) each have

their own dedicated connection path allocated with the AIN (element 44, figure 2,

Dulman). The path selected is based on the service requested by the user

(column 4, lines 55-64, Dulman). The path is selected only if the user is

authenticated through the firewall (column 4, lines 45-55, Dulman and element

40, figure 2, Dulman).

Strauss also teaches a design that features an AIN (column 7, lines 40-45,

Strauss). The design teaches how encapsulation means are present for AIN

type networks (encapsulation is equivalent to tunneling) (column 8, line 45,

Strauss). In addition, Strauss also teaches how an AIN can be utilized virtually

(column 13, lines 26-38, Strauss).

It would have been obvious to one skilled in the art, during the time of the

invention, to have combined the teachings of Dulman with those of Strauss, for

providing a universal or multi-purpose network server having enhanced

processing functions which are performed in association with a

telecommunications network to provide multi-mode communications via a

combination of the public switched telephone network (PSTN) and a public

packet data network, such as the Internet (column 7, lines 23-30, Strauss)).

6. With regards to claims 6, Dulman teaches through Straus, a method, further

comprising establishing said tunneling protocol permanently and initiating said

integrated signaling and authenticating the user of said customer premises

equipment only in response to detecting appropriate activity in said customer

premises equipment

(Dulman teaches a design for an advanced intelligent network (AIN) (column

4, lines 20-24, Dulman). The design features one or more CPE (element 16,

figure 2, Dulman) connected to a NAT (equivalent to NT) (element 11, figure 2,

Dulman). The NAT is attached to the AIN (element 44, figure 2, Dulman), which

provides access to the available services (equivalent to SP) (elements 48-60,

figure 2, Dulman). The AIN is capable of being an ATM (column 10, lines 58-61,

Dulman). The available services (elements 48-60, figure 2, Dulman) each have

their own dedicated connection path allocated with the AIN (element 44, figure 2,

Dulman). The path selected is based on the service requested by the user

(column 4, lines 55-64, Dulman). The path is selected only if the user is

authenticated through the firewall (column 4, lines 45-55, Dulman and element

40, figure 2, Dulman).

Strauss also teaches a design that features an AIN (column 7, lines 40-45,

Strauss). The design teaches how encapsulation means are present for AIN

type networks (encapsulation is equivalent to tunneling) (column 8, line 45,

Strauss). In addition, Strauss also teaches how an AIN can be utilized virtually

(column 13, lines 26-38, Strauss).

It would have been obvious to one skilled in the art, during the time of the

invention, to have combined the teachings of Dulman with those of Strauss, for

providing a universal or multi-purpose network server having enhanced

processing functions which are performed in association with a

telecommunications network to provide multi-mode communications via a

combination of the public switched telephone network (PSTN) and a public

packet data network, such as the Internet (column 7, lines 23-30, Strauss)).

7. With regards to claim 7, Dulman teaches through Straus, a method, further

   comprising authenticating the user of said customer premises equipment both by

   said access server function and by the selected service provider

   (Dulman teaches a design for an advanced intelligent network (AIN) (column

   4, lines 20-24, Dulman). The design features one or more CPE (element 16,

   figure 2, Dulman) connected to a NAT (equivalent to NT) (element 11, figure 2,

   Dulman). The NAT is attached to the AIN (element 44, figure 2, Dulman), which

   provides access to the available services (equivalent to SP) (elements 48-60,

   figure 2, Dulman). The AIN is capable of being an ATM (column 10, lines 58-61,

   Dulman). The available services (elements 48-60, figure 2, Dulman) each have

   their own dedicated connection path allocated with the AIN (element 44, figure 2,

   Dulman). The path selected is based on the service requested by the user

   (column 4, lines 55-64, Dulman). The path is selected only if the user is

   authenticated through the firewall (column 4, lines 45-55, Dulman and element

40, figure 2, Dulman). After firewall verification, the user must also go through a

login procedure to ensure the user is authorized to make requests (column 16,

lines 48-61, Dulman).

Strauss also teaches a design that features an AIN (column 7, lines 40-45,

Strauss). The design teaches how encapsulation means are present for AIN

type networks (encapsulation is equivalent to tunneling) (column 8, line 45,

Strauss). In addition, Strauss also teaches how an AIN can be utilized virtually

(column 13, lines 26-38, Strauss).

It would have been obvious to one skilled in the art, during the time of the

invention, to have combined the teachings of Dulman with those of Strauss, for

providing a universal or multi-purpose network server having enhanced

processing functions which are performed in association with a

telecommunications network to provide multi-mode communications via a

combination of the public switched telephone network (PSTN) and a public

packet data network, such as the Internet (column 7, lines 23-30, Strauss)).

8. With regards to claim 13, Dulman teaches through Straus, the network element,

further comprising means for cooperating with a network termination point

between itself and each customer premises equipment, said network termination

point being arranged to provide a separate tunnel from itself each of several

customer premises equipments and to combine the separate tunnels into fewer

tunnels, from itself to the network element

(Dulman teaches a design for an advanced intelligent network (AIN) (column

4, lines 20-24, Dulman). The design features one or more CPE (element 16,

figure 2, Dulman) connected to a NAT (equivalent to NT) (element 11, figure 2,

Dulman). The NAT is attached to the AIN (element 44, figure 2, Dulman), which

provides access to the available services (equivalent to SP) (elements 48-60,

figure 2, Dulman). The AIN is capable of being an ATM (column 10, lines 58-61,

Dulman). The disclosure also teaches that the design allows the NAP to be a

conventional switch or an ATM switch (column 10, lines 10-43, Dulman). It is

well known in the art that switches are able to combine multiple elements to

fewer elements, thereby combining connections.

Strauss also teaches a design that features an AIN (column 7, lines 40-45,

Strauss). The design teaches how encapsulation means are present for AIN

type networks (encapsulation is equivalent to tunneling) (column 8, line 45,

Strauss). In addition, Strauss also teaches how an AIN can be utilized virtually

(column 13, lines 26-38, Strauss).

It would have been obvious to one skilled in the art, during the time of the

invention, to have combined the teachings of Dulman with those of Strauss, for

providing a universal or multi-purpose network server having enhanced

processing functions which are performed in association with a

telecommunications network to provide multi-mode communications via a

combination of the public switched telephone network (PSTN) and a public

packet data network, such as the Internet (column 7, lines 23-30, Strauss)).

9. With regards to claim 14, Dulman teaches through Straus, the network element

wherein the number of said fewer tunnels is one

(Dulman teaches a design for an advanced intelligent network (AIN) (column

4, lines 20-24, Dulman). The design features one or more CPE (element 16,

figure 2, Dulman) connected to a NAT (equivalent to NT) (element 11, figure 2,

Dulman). The NAT is attached to the AIN (element 44, figure 2, Dulman), which

provides access to the available services (equivalent to SP) (elements 48-60,

figure 2, Dulman). The AIN is capable of being an ATM (column 10, lines 58-61,

Dulman). The disclosure also teaches that the design allows the NAP to be a

conventional switch or an ATM switch (column 10, lines 10-43, Dulman). It is

well known in the art that switches are able to combine multiple elements to

fewer elements, thereby combining connections.

Strauss also teaches a design that features an AIN (column 7, lines 40-45,

Strauss). The design teaches how encapsulation means are present for AIN

type networks (encapsulation is equivalent to tunneling) (column 8, line 45,

Strauss). In addition, Strauss also teaches how an AIN can be utilized virtually

(column 13, lines 26-38, Strauss).

It would have been obvious to one skilled in the art, during the time of the

invention, to have combined the teachings of Dulman with those of Strauss, for

providing a universal or multi-purpose network server having enhanced

processing functions which are performed in association with a

telecommunications network to provide multi-mode communications via a

combination of the public switched telephone network (PSTN) and a public

packet data network, such as the Internet (column 7, lines 23-30, Strauss)).

Remarks

After reevaluation of the previous office action, a new search has been

performed and new prior art has been discovered. In lieu of the findings, a new office

action has been compiled.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Azizul Choudhury whose telephone number is (571)

272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

AC

                                                    Jason Cardone
                                        Supervisory Patent Examiner (SPE)